

IN THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in this application.

Listing of claims:

1. (Currently Amended) A modified enzyme comprising the amino acid sequence of SEQ ID NO:2 ~~in which glycine at amino acid 38 in a *L. brevis* or *L. kefir* rec-(R)-alcohol dehydrogenase enzyme is replaced with aspartic acid~~; wherein the modified enzyme exhibits increased NAD(H) affinity compared to the wildtype *L. brevis* or *L. kefir* rec-(R)-alcohol dehydrogenase enzyme.

Claims 2-7 (Cancelled).

8. (Withdrawn) An isolated polynucleotide which encodes the modified enzyme of claim 1.

9. (Withdrawn) The isolated polynucleotide of claim 8, which comprises the nucleotide sequence of SEQ ID NO:1.

10. (Withdrawn) A plasmid vector comprising the isolated polynucleotide of claim 8.

11. (Withdrawn) A host cell comprising the isolated polynucleotide of claim 8.

12. (Withdrawn) A method of making the modified enzyme of Claim 1 comprising: replacing a glycine at amino acid 38 in a wildtype *L. brevis* or *L. kefir* rec-(R)-alcohol dehydrogenase enzyme with aspartic acid to obtain an enzyme comprising the amino acid sequence of SEQ ID NO:2 and wherein said modified enzyme exhibits increased NAD(H) affinity compared to an the wildtype *L. brevis* or *L. kefir* rec-(R)-alcohol dehydrogenase enzyme.

Claims 13-18 (Cancelled).

19. (Withdrawn) A method of making the modified enzyme which has improved NAD(H) affinity comprising culturing the cell of claim 11 for a time and under conditions

suitable for the expression of the polynucleotide which encodes said enzyme; and collecting the enzyme.

20. (Withdrawn) The isolated nucleotide sequences of SEQ ID NO:4 and SEQ ID NO:5.

21. (Withdrawn) Sense and antisense polynucleotides which encode TDRHSDVG.

22. (Withdrawn) A method of enantioselective reduction of a organic compound comprising reacting said compound with the modified enzyme of claim 1 and at least one of NAD(H) and NAD⁺, wherein said organic compound is selected from the group selected from the group consisting of ketones, α -keto esters, β -keto esters, γ -keto esters, and combinations thereof.

23. (Withdrawn) The method of claim 22, which yields a chiral alcohol.

24. (Withdrawn) The method of claim 23, wherein said chiral alcohol is an (R)-alcohol.

25. (Withdrawn) The method of claim 22, wherein said reacting is with NAD(H).

Claims 26-31 (Cancelled).

32. (Withdrawn) A method of enantioselective oxidation of alcohols comprising reacting an alcohol comprising reacting a alcohol with the modified enzyme of claim 1 and at least one of NAD(H) and NAD⁺.

33. (Withdrawn) The method of claim 32, which yields a chiral alcohol.

34. (Withdrawn) The method of claim 33, wherein said chiral alcohol is a (R)-alcohol.

35. (Withdrawn) The method of claim 32, wherein said reacting is with NAD(H).

Claims 36-41 (Cancelled).